

### 3.5.3 RUN BATCH UPDATE

#### Introduction

Batch updates are programs that take Standard Data Output (SDO) files (see Section 3.5.1) and apply the data contained within them to the StEPS data base. SDO files may be created by keying, check-in, or some other process; or may be created independently by programmers or analysts.

There are 2 ways in which the batch updates can be run:

1. Nightly production run
2. StEPS interactive screen

Each of these is explained in detail below.

#### 3.5.3.1 NIGHTLY PRODUCTION RUNS

When survey data is received and keyed in the National Processing Center (NPC), analysts usually want this data applied to the StEPS data base as soon as possible. StEPS has a procedure in place to do this called the “nightrun”.

1. Each night (Monday through Friday) at 7:00 PM, a program called “startjob.scl” is run. This program loops through all of the surveys in StEPS (CENTAL.SURVEYS) and checks the \$SPRGLIB directory for the existence of two files:

- nightrun.sas
- nightrun.ksh

If these two files exist, the “nightrun.ksh” file is started as a batch job. This batch job will execute the batch update program.

2. The batch update program will check the Master Control System (MCS) for survey files having the following naming convention:

<u>Character</u>	<u>Description</u>
1	Technology code (COLTEC)
2-5	MCSDIR code for a specific survey (e.g., d4xx, hz00); this code can be found in the StEPS CENTRAL.SURVEYS file
6-8	Unique number/letter combination assigned by MCS
9	A period (.)
10-12	‘z01’ for keyed data, ‘chk’ for checked-in data

Sample filename: 3ie99085.z01

3. If MCS file(s) exist, the batch update program will:

- a. Transfer the file(s) to the survey's \$DATALIB directory on epbu01.

Note: If a file with the same exact name already exists in the survey's \$DATALIB directory, the file will not get loaded. A message will display, informing you that the file is already in the directory and cannot be copied.

- b. If more than one file exists, concatenate the files into one file with a date/time stamp in the name. The concatenated file will also be stored in \$DATALIB.

Sample filename: sdo010226192006.dat

- c. Run the batch updates.

If the file does not match the expected format of an SDO (e.g., SURVEY does not equal characters 1-6), then the file will be rejected and the batch update will not be performed. (For more information on the SDO layout, see section 3.5.1.)

When the night run script has finished executing, a log is written to \$SPRGLIB/nightun.log. This log will identify any errors that may have been encountered during the program run. It can be viewed from the "Browse Data" screen in the Tools module.

If the batch update ran successfully, the run time can be viewed via the "Production Log" screen in the MIS module.

NOTE: Sometimes you may want to turn the nightrun off so that the batch updates do not update the database. You may want to do this if you have "closed out" your survey and do not want any additional data to be applied to the data base, or if you are performing some type of testing and do not want new data applied. To prevent a survey's "nightrun" from executing, access the Survey Setup screen (from the Survey Specifications Menu) and click on the "Switch nightrun scripts off" button. You can turn the nightrun scripts back on using this same screen.

### **3.5.3.2 RUNNING BATCH UPDATES INTERACTIVELY**

There may be times when you do not want to wait until evening, but want to apply batch updates during the day. You may have created your own SDO file; want to apply an MCS file, but don't want to wait for the night run; or you may want to run the batch update in test mode. Batch updates can be applied interactively in StEPS using the "Run Batch Updates" screen. Only users with RUNPRIV = 'P' can run batch updates interactively.

To access this screen:

- Click on the COLLECTION ACTIVITIES button from the StEPS Main Menu.
- Click on the BATCH UPDATE button from the Collection Activities Menu.
- Select the “Run batch update” option to display the following:

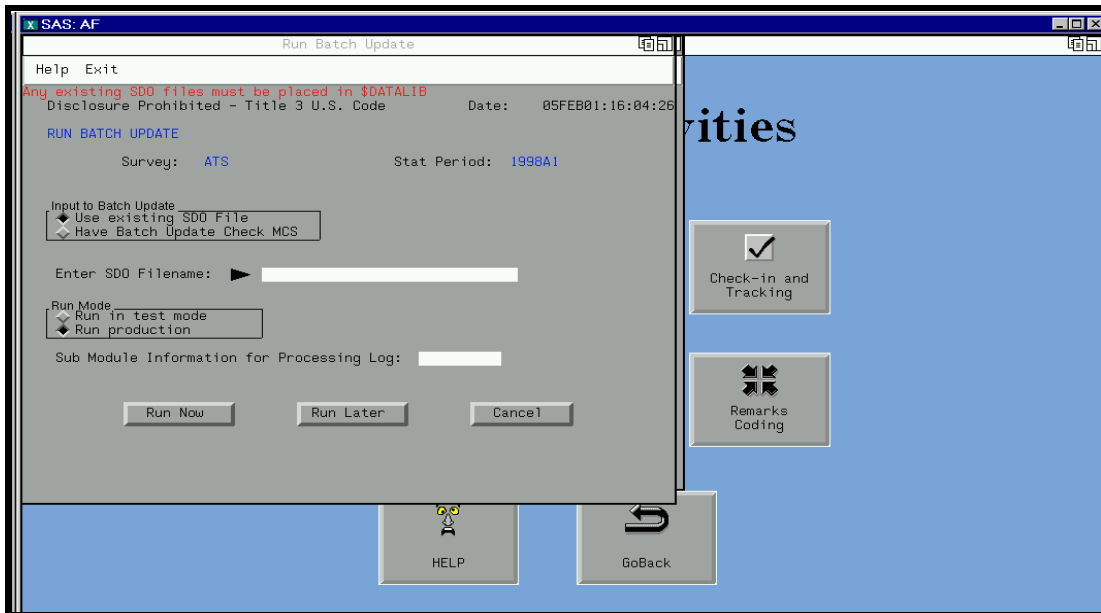


Figure 3.5.3 Run Batch Update Screen

To run the batch update for a survey:

1. Be sure you have selected the appropriate survey and stat period from the User Setup screen. (The survey and stat period you are currently processing will display in the top portion of the “Run Batch Update” screen.)
2. Select the SDO file that you want applied to the database. You may choose an existing file from the \$DATALIB directory or have the batch update program check for files in the MCS. (See section 3.5.2 for more information on the MCS).

- Using an existing SDO file:

In order to run the batch update on an existing SDO file, the file must be stored in the directory \$DATALIB.

If you choose this option, you must enter the name of the file in the “Enter SDO filename” field. Either type the name directly or click on the arrow (➤) to display a pick list of filenames from which to choose.

If you select a file using the pick list from the arrow, the contents of the file will display on the screen. A confirmation message will display. Click “Yes” if this is the correct

file; otherwise, click “No”.

Note: The suffix for keyed files is “.z01”. The suffix for check-in files is “.chk”. If you create your own SDO file, be sure to give it a 3-character suffix (e.g., “births.sdo”, “sales.dat”).

- Have Batch Update check MCS:

If you are a “registered” user of the MCS (assigned by TMO) will be able to use this option. (See section 3.5.2 for more information on the MCS.) When you click on this option, a batch program checks the MCS for SDO programs and transfers any found to the StEPS directory \$DATALIB. If no SDO files exist in the MCS, a log will display indicating that no MCS files were found.

4. You may run the batch update in test mode or in production.

- Test

When in test mode, *actual* data sets are not updated. The program will make a copy of the data sets and store them in the directory, \$WORK. These temporary files will be updated.

Each time the batch update is run, a number of different files (see Section 3.5.4) are produced. These files are stored in the directory \$DATALIB.butest. Whenever a new batch update is run in test mode, the files within this directory are overwritten.

All batch output from keying (or any other source) should be reviewed thoroughly in test mode prior to running in production.

NOTE: Any time a test batch update is run on a production MCS file, you must contact TMO afterwards to have that MCS file put back in the “out” directory of the MCS. Otherwise, the nightrun will not be able to pick up the file to run it in production.

- Production

When interactively running batch update in production mode, be sure other users are not updating records in the system at the same time. If the SDO file is large, it may take a long time to run and may impact system performance. In addition, users may be correcting records that could be overwritten by the batch update program. Problems could also arise if the batch update program and a user try to update the same record at the same time.

There are various files (e.g., dispositions, transmissions, audit trails, logs) associated with each batch update run. (See section 3.5.4 for more information on these different files.) All files associated with a given run are stored in a single directory. If running in

production, these files will be stored in \$SURVLIB.buyymmddhhmmss.

When you run the batch update in production, a record will be appended to the production log file, indicating the start, end, and elapsed time of the program.

You may specify a “sub module” name (in the field at the bottom of the screen) to aid in identifying the batch run. This sub module name will appear in the production log record.

5. You may run the batch update immediately or schedule a time for the batch update to run.

- Run Now

If you choose the “Run Now” option, the batch update program will run immediately. You may not do any work in StEPS until the batch update program has finished executing.

When the job is complete, the log will automatically display on your screen. Click the EXIT p-menu or press F3 to exit the log screen and return to the Batch Update menu screen.

Batch update results can be viewed or printed from the “Batch Update Information” screen. (See section 3.5.4).

- Run Later

If you choose the “Run Later” option, you will be prompted to select a run time. Choose the run time and click on “OK”. A confirmation message will display. Click “Yes” to schedule the run, else click “No”.

Job files associated with batch update are stored in your home directory (<survey>batchu.sas and <survey>batchu.ksh). The log file will be stored in “<survey>batchu.log”.

NOTE: Never run two or more batch updates close together, unless you are absolutely sure that the first batch update will finish before the next one starts. Two programs vying for the same records may cause one or both programs to fail.

When the batch update program has finished executing:

- a. All batch update related files will be stored in \$SURVLIB.buyymmddhhmmss.
- b. A record will be inserted into the survey’s production log file to indicate that the batch run has been completed. The log will indicate the start time of the batch update, the end time, and the elapsed time. The module name will be “BATCHUPD”. The submodule name will vary, depending on the “suffix” of the file and/or whether or not you entered your own submodule name in the “Run Batch

Update” screen.

NOTE: Access the production log screen via the MIS button from the StEPS Main Menu.

- c. If you would like to have an e-mail message sent to you when the batch update run has been completed, you can specify this in the “cc:Mail data set screen”. The message will contain a summary of the batch update, including counts for the # of IDs processed, rejected, added, deleted, ghosted, etc.

It is recommended that at least one production programmer and one survey analyst include their name for the e-mail notification. Someone connected to the survey should monitor the daily batch update messages to ensure potential problems are detected early.

To set up an e-mail notification:

- Click on the SURVEY SPECIFICATIONS button from the StEPS Main Menu.
- Click on the OTHER SPECIFICATIONS button from the Survey Specifications menu.
- Select the “View/Update cc:Mail Dataset” option.
- Follow the instructions provided on the screen to add or update information in this file.

NOTE: The job flag for batch update is “BU”.

6. Batch update results can be viewed or printed from the “Batch Update Information” screen. (See section 3.5.4).

## P-Menus

P-menu	Options	Function
HELP	Run Batch Update Help (F1) WhoamI (F7)	Display help information on running the batch update. Display user default and systems information.
EXIT	StEPS Main Menu (Home) Exit (F3)	Return to StEPS Main Menu. Exit to previous screen.